1.Write a query that allows you to inspect the schema of the naep table

SELECT

COLUMN\_NAME

FROM

information\_schema.columns

WHERE

TABLE\_NAME = 'naep'

2. Write a query that returns the first 50 records of the naep table.

SELECT \*

FROM naep

FETCH FIRST 50 ROWS ONLY

3. Write a query that returns summary statistics for avg\_math\_4\_score by state. Make sure to sort the results alphabetically by state name.

SELECT state ,Max(avg\_math\_4\_score) as Max\_score,Min(avg\_math\_4\_score) as Min\_score,count(avg\_math\_4\_score) as Count\_score,Sum(avg\_math\_4\_score) as Score\_Total, AVG(avg\_math\_4\_score) as Average\_score

,Percentile\_cont(0.25) within group (Order By avg\_math\_4\_score) as percent\_25\_quantile,

Percentile\_cont(0.50) within group (Order By avg\_math\_4\_score) as percent\_50\_quantile,

Percentile\_cont(0.75) within group (Order By avg\_math\_4\_score) as percent\_75\_quantile

from naep

GROUP BY State

Order By State Asc;

4. Write a query that alters the previous query so that it returns only the summary statistics for avg\_math\_4\_score by state with differences in max and min values that are greater than 30.Make sure to sort the results alphabetically by state name.

SELECT state ,Max(avg\_math\_4\_score) as Max\_score,Min(avg\_math\_4\_score) as Min\_score,count(avg\_math\_4\_score) as Count\_score,Sum(avg\_math\_4\_score) as Score\_Total, AVG(avg\_math\_4\_score) as Average\_score,Percentile\_cont(0.25) within group (Order By avg\_math\_4\_score) as percent\_25\_quantile,Percentile\_cont(0.50) within group (Order By avg\_math\_4\_score) as percent\_50\_quantile,Percentile\_cont(0.75) within group (Order By avg\_math\_4\_score) as percent\_75\_quantile

from naep

GROUP BY State Order By State Asc;

SELECT state ,Max(avg\_math\_4\_score),Min(avg\_math\_4\_score)

from naep

Group By state

Having Max(avg\_math\_4\_score) > 30 and Min(avg\_math\_4\_score) > 30

order By state;

5.Write a query that returns a field called bottom\_10\_states that lists the states in the bottom 10 for avg\_math\_4\_score in the year 2000.

SELECT year,state, avg\_math\_4\_score as bottom\_10

from naep

where year = 2000

order by avg\_math\_4\_score asc

Limit 10

6.Write a query that calculates the average avg\_math\_4\_score rounded to the nearest 2 decimal places over all states in the year 2000.

SELECT ROUND(avg(avg\_math\_4\_score),2) As Average\_2000

from naep

where year = 2000

7.Write a query that returns a field called below\_average\_states\_y2000 that lists all states with an avg\_math\_4\_score less than the average over all states in the year 2000.

SELECT state,avg\_math\_4\_score as below\_average\_states\_y2000

from naep

where avg\_math\_4\_score < 224.80 and year = 2000

Revised:

SELECT state

from naep

where year =2000

and avg\_math\_4\_score <(SELECT AVG(avg\_math\_4\_score)from naep where year =2000)

8. Write a query that returns a field called scores\_missing\_y2000 that lists any states with missing values in the avg\_math\_4\_score column of the naep data table for the year 2000.

SELECT state

from naep

where avg\_math\_4\_score is NULL and year = 2000;

9.Write a query that returns for the year 2000 the state, avg\_math\_4\_score, and total\_expenditure from the naep table left outer joined with the finance table, using id as the key and ordered by total\_expenditure greatest to least. Be sure to round avg\_math\_4\_score to the nearest 2 decimal places, and then filter out NULL avg\_math\_4\_scores in order to see any correlation more clearly.

select

naep.state,

Round(naep.avg\_math\_4\_score,2) As avg\_math\_4\_score,

finance.total\_expenditure

From naep

left join

finance

on

naep.id = finance.id

Where naep.year = 2000 and avg\_math\_4\_score is not NULL

order BY finance.total\_expenditure DESC;